

## CLAIMS

1     1.           An adjustable reflector socket for use in  
2     conjunction with a lighting reflector and light bulb, said  
3     socket comprising  
4                 a bulb socket,  
5                 a mounting member, said mounting member having an  
6     exterior sidewall, a first end and a second end, said first  
7     end having an end plate, said second end being adjacent to  
8     said bulb socket, said sidewall having at least one groove  
9     formed therein, said sidewall groove having a plurality of  
10    apertures formed therein, and  
11                a mounting plate, said mounting plate having a  
12    planar component, said planar component having at least one  
13    mounting aperture through which a mounting fastener passes  
14    to attach said mounting plate to the lighting reflector,  
15    and a centrally located mounting member aperture, said  
16    mounting member aperture configured to permit said mounting  
17    member to be inserted therethrough, said mounting plate  
18    also having at least one flange member, said flange member

19 extending generally perpendicularly from the juncture of  
20 said mounting plate and said mounting member aperture, said  
21 flange member dimensioned to be slidably adapted in said  
22 sidewall groove, said flange member having formed therein  
23 at least one flange aperture, a flange fastener at said  
24 flange aperture securing said flange member to said  
25 mounting member at one of said apertures formed in said  
26 groove of said mounting member.

1 2. The adjustable reflector socket according to  
2 claim 1 wherein at least a portion of said end plate is  
3 detachable from said mounting member.

1 3. The adjustable reflector socket according to  
2 claim 1 wherein said mounting member comprises a pair of  
3 grooves.

1 4. The adjustable reflector socket according to  
2 claim 3 wherein each of said grooves is located on opposite  
3 sides of said mounting member.

1 5. The adjustable reflector socket according to  
2 claim 3 wherein said mounting plate comprises two flanges,  
3 each of said flanges being engaged in said grooves.

1 6. The adjustable reflector socket according to  
2 claim 5 wherein said flanges are located on opposite sides  
3 of said mounting plate.

1 7. The adjustable reflector socket according to  
2 claim 1 wherein said flange has more than one flange  
3 aperture formed therein.

1 8. The adjustable reflector socket according to  
2 claim 5 wherein each of said flanges has more than one  
3 flange aperture formed therein.

1 9. The adjustable reflector socket according to  
2 claim 1 wherein said groove extends from said first end to  
3 said second end of said mounting member.

1 10. The adjustable reflector socket according to  
2 claim 1 wherein said mounting plate comprises a mounting  
3 aperture in the same plane as said groove, and another  
4 mounting aperture in the form of a slot, said mounting  
5 plate having a peripheral edge, said slot extending  
6 centrally from said peripheral edge.

1 11. The adjustable reflector socket according to  
2 claim 1 wherein said groove has a width and a depth and  
3 said flange has a width and a thickness, said groove width  
4 being greater than said flange width, and said groove depth  
5 being approximately the same as said flange width.

1 12. The adjustable reflector socket according to  
2 claim 1 wherein said groove has four apertures formed  
3 therein, and said flange has two apertures formed therein.

1 13. The adjustable reflector socket according to  
2 claim 5 wherein each groove has four apertures formed  
3 therein and each flange has two apertures formed therein.

1 14. The adjustable reflector socket according to  
2 claim 1 wherein said flange fastener is positioned into a  
3 predetermined aperture in said groove and into a  
4 predetermined aperture in said flange depending upon the  
5 choice of lighting reflector and the light bulb, said  
6 flange fastener securing said mounting plate to said  
7 mounting member.

1 15. The method for obtaining the maximum emitted  
2 light from a bulb through the use of a lighting reflector  
3 having an adjustable reflector light socket comprising the  
4 steps of:  
5       securing a mounting plate to the sidewall of a  
6 lighting reflector, said mounting plate having a centrally  
7 located mounting member aperture, said mounting member  
8 aperture configured to permit said mounting member to be  
9 inserted therethrough, said mounting plate also having at  
10 least one flange member, said flange member extending  
11 generally perpendicularly from the juncture of said  
12 mounting plate and said mounting member aperture,

13                inserting a mounting member through said mounting  
14 member aperture in said mounting plate, said mounting  
15 member having at least one groove formed therein with a  
16 bulb socket being secured to one end of said mounting  
17 member, and  
18                securing said mounting member to said mounting  
19 plate at a predetermined location on said mounting member  
20 dependant on the type of bulb and type of lighting  
21 reflector being used.

1    16.           The method according to claim 15 wherein said  
2 flange member is dimensioned to be slidably adapted in said  
3 mounting member groove, said flange member having formed  
4 therein a plurality of flange apertures, said groove having  
5 formed therein a plurality of groove apertures, said method  
6 including the additional step of selecting the flange  
7 aperture and groove aperture for attachment thereat of a  
8 flange fastener, said flange fastener securing said flange  
9 member to said mounting member at a location to maximize  
10 the emitted light given the choice of the bulb and the  
11 lighting reflector.